# STATE OF MISSOURI

# **DEPARTMENT OF NATURAL RESOURCES**

# MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

# GENERAL PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

< MO-R401xxx >

Permit No.

Owner: Address:	< name > < address >					
Continuing Authority: Address:		< name, or Same as above > < address, or Same as above >				
Facility Name: Facility Address:	< name > < physical addres	< name > < physical address >				
Legal Description:	<sup>1</sup> / <sub>4</sub> , <sup>1</sup> / <sub>4</sub> , <sup>1</sup> / <sub>4</sub> , Sec. xx,	$\frac{1}{4}$ , $\frac{1}{4}$ , Sec. xx, TxxN, RxxW, < county > County				
Receiving Stream: First Classified Stream and ID: JSGS Basin & Sub-watershed No.:	< 1 <sup>st</sup> classified str	receiving stream > < (U, C, P, L1, L2, L3) > 1 <sup>st</sup> classified stream > < (U, C, P, L1, L2, L3) > < (ID number) > (USGS HUC14 # ) >				
s authorized to discharge from the faci is set forth herein:	ility described herein, ir	accordance with the effluent limitations and monitoring requirements				
FACILITY DESCRIPTION						
All Outfalls						
Surface treatment cell for landfarming	soil contaminated with	petroleum hydrocarbons.				
		rs, discharges under the Missouri Clean Water Law and the National other regulated areas. This permit may be appealed in accordance with				
May 7, 1998						
Effective Date Issu	ue Date	Stephen M. Mahfood, Director, Department of Natural Resources Executive Secretary, Clean Water Commission				
May 6, 2003 Expiration Date (10 780-0041 (10-93)		Jim Hull, Director of Staff, Clean Water Commission				

#### APPLICABILITY

- 1. This general permit authorizes the discharge of storm water from landfarming of soils contaminated with petroleum hydrocarbons in surface treatment cells. This permit applies to, but is not limited to, Standard Industrial Classification (SIC) code 5541.
- 2. Only soils contaminated with gasoline, diesel fuel, fuel oil, kerosene, or aviation fuel, and having a TPH concentration of <2500 ppm dry weight, may be placed in a treatment cell under this permit. Soils contaminated with used oil, as defined in 10 CSR 25-11.279 incorporating 40 CFR 279.1, shall not be landfarmed under this permit.
- 3. Holders of current site-specific State Operating permits who desire to apply for inclusion under this general permit should contact the department for application requirements.
- 4. This permit does not authorize the discharge of waters other than storm waters.
- 5. This permit is not transferrable to other owners or operators.
- 6. If at any time the Missouri Department of Natural Resources (MDNR) determines that the quality of waters of the state may be better protected by requiring the owner/operator to apply for a site-specific State Operating permit, the department may do so.
- 7. If at any time the owner/operator of a landfarm desires to apply for a site-specific State Operating permit, the owner/operator may do so.
- 8. This permit does not apply to storm water discharges:
  - (a) within 1,000 feet of streams identified as a losing stream\*,
  - (b) within 1,000 feet of streams or lakes listed as an outstanding national or state resource waters\*,
  - (c) within 1,000 feet of reservoirs or lakes used for public drinking water supplies (class L1)\*,
  - (d) within 1,000 feet of streams, reservoir, or lakes identified as critical habitat for endangered species,
  - (e) within two miles upstream of biocriteria reference locations\*, or
  - (f) where discharge is to a sinkhole or other direct conduit to groundwater.
- 9. The permittee is exempted from the requirement to obtain an NPDES construction permit for this activity when the requirements of this general permit are met.

<sup>\*</sup> Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and may be purchased from MDNR.

#### SPECIAL CONDITIONS

- 1. Report as Ano-discharge@ when a discharge does not occur during the report period.
- 2. Report as Ano-discharge@ if discharge is to a Wastewater Treatment Facility (WWTF) holding a permit from this agency. The permittee must keep hauling records and provide written documentation to the department that the WWTF has been notified and has agreed to accept the discharge prior to discharge.
- 3. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (e) There shall be no significant human health hazard from incidental contact with the water;
  - (f) There shall be no acute toxicity to livestock or wildlife watering;
  - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 4. This permit may be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2) (C), and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
  - (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - (b) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

5. This permit may be reopened and modified or alternatively revoked and reissued, to incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to ensure compliance with Missouri's Water Quality Standards.

## **SPECIAL CONDITIONS** (continued)

6. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 ug/L);
  - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- 7. The outfall from the retention basin must be marked in the field.
- 8. Surface Treatment Cell Requirements and Specifications

(Note that permitted treatment cells established before the effective date of this permit must be in compliance with these revised requirements by April 24, 1999.

- (a) Treatment cell construction and operation shall comply with guidelines and requirements of the Hazardous Waste Program.
- (b) Treatment cell air emissions, including odors, shall comply with all Air Pollution Control Program regulations.
- (c) Transport of contaminated soil to a treatment cell shall comply with all Solid Waste Management Program regulations.
- (d) Treatment cells shall not be located within ¼ mile of any other treatment cell.
- (e) The treatment cell shall not be located within a wetlands, or within the 10-year floodplain of a classified stream as defined in 10 CSR 20-7.031.
- (f) The treatment cell shall be located at least:

250 feet from any surface water; 500 feet from any caves, sinkholes, private water supply wells, lakes, or intakes on streams; and 1,000 feet from any public drinking water supply wells, lakes, or intakes on streams.

- (g) Minimum vertical depth from the bottom of a treatment cell to the seasonal high water table shall be at least five feet.
- (h) The treatment cell floor shall be surrounded by a two foot berm to contain contaminated soils and exclude water runon.
- (i) The treatment cell shall be lined with a petroleum resistant 12 ml plastic. The liner shall be placed so as to form a seal that effectively keeps storm water in the cell from discharging to ground or surface water. The liner shall be removed when the remediation activities are completed.
- (j) Contaminated soil shall be spread within the treatment cell to a depth >18 but <24 inches to allow tilling without compromising the integrity of the plastic liner.

## **SPECIAL CONDITIONS** (continued)

- 8. Surface Treatment Cell Requirements and Specifications (continued)
  - (k) Treatment cells shall not contain >2500 cubic yards of contaminated soil. Contaminated soil from more than one facility may be placed in the treatment cell if soils are kept separate. The permittee shall submit written notification to the Water Pollution Control Program to document that additional soil is being placed in a treatment cell. This notification shall detail the source, amount, and contamination level of the soil to be added.
  - (l) The treatment cell shall be constructed such that storm water runoff from the cell is collected in a retention basin which has one outfall. The retention basin shall have a liner that meets standard engineering specifications (as per 10 CSR 20-8) and shall be sized to retain the volume of water resulting from a 10-year 24 hour storm event. The basin provides for settling of suspended material, and adequate retention time to allow for testing water and treatment as needed to meet permit effluent limitations before discharging.
  - (m) The permittee shall obtain approval from the Hazardous Waste Program (HWP) before removing remediated soil from the landfarm. A written request with laboratory analysis of soils shall be submitted to document that soil meets the HWP=s Aclean fill@ requirements of less than 50 ppm TPH, 1.0 ppm BTEX, 0.5 ppm benzene, and 60 ppm methyl tertiary-butyl ether (MTBE). Sampling frequency shall be one composite sample per 100 cubic yards of soil and composed of soil from no more than 4 separate locations, and collected from a depth no less than 12 inches.
  - (n) Stockpiled soils shall be placed on and covered with 12 ml or greater plastic unless soil is under roof and not exposed to storm water.

#### DUTY TO COMPLY

The permittee shall comply with all conditions and terms of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

#### **TERMINATION**

If activities covered by this permit have ceased and the permit no longer applies, the permittee shall request termination of the permit. The permittee shall submit a completed Form H (Termination of a General Permit); a copy of their Ano-further action@ letter from the Hazardous Waste Program for all sites for which soil has been remediated under this permit or a copy of sampling results that indicate all remediated soils placed in the cell meet Aclean fill@ requirements; and a cover letter documenting that the any plastic liner used has been removed and that the site has been stabilized. A landfarming site shall be considered stabilized when vegetative cover is at least 70% of fully established plant density over 100% of the disturbed area.

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT SAMPLE FREQUENCY TYPE	
All Outfalls						
Flow	MGD	*		*	once/quarter estimate	24 hr.
Benzene	mg/L	0.05		0.05		<b>1</b> .
Toluene	mg/L	*		*	once/quarter	grab
Ethylbenzene	mg/L	*		*	once/quarter	grab
Xylene	mg/L	*		*	once/quarter	grab
Total BETX**	mg/L	0.75		0.75	once/quarter	grab
Methyl butyl-tertiary ether	mg/L	*		*	once/quarter	grab
					once/quarter	grab
Oil and Grease	mg/L	15		10	once/quarter	grab
Total Petroleum Hydrocarbons	mg/L	10		10	once/quarter	grab
Total Suspended Solids	mg/L	50		30		_
pH – Units	SU	***		***	once/quarter	grab
					once/quarter	grab

MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u>; THE FIRST REPORT IS DUE  $\leq$  date  $\geq$ . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Total BETX shall be measured as the sum of Benzene, Ethylbenzene, Toluene, and Xylene.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.